

PATENT

Docket No. 1232-447

S/N 09/075,883

LISTING OF CLAIMS

Claims 2-13, 15-17, 19-23, 25-28 and 30-38 are pending. By this Amendment, claims 2, 6, 9, 11, 15, 23, 33-35 and 37 are amended and claim 10 is canceled without prejudice or disclaimer. The following listing of claims will replace all prior versions and listings of claims in this application.

1. (Canceled)

2. (Currently amended) An image sensing apparatus having ~~a lens for forming an image of a subject~~, a monitor in which direction of a display can be changed relative to a direction in which light from the subject impinges upon the a lens, and a photography assist ~~mechanism means~~ for adjusting photographic conditions automatically, said photography assist ~~mechanism means~~ having an automatic exposure control means which,

wherein at the time of self-photography, in which the direction in which light impinges upon the lens and the display direction of the monitor agree, said automatic exposure control means performs control by a photometry method different from that at the time of other ordinary photography.

3. (Previously Presented) The apparatus according to claim 2, wherein at the time of self-photography, said automatic exposure control means further makes response slower than that at the time of ordinary photography.

4. (Previously Presented) An image sensing apparatus having a lens for forming an image of a subject, a monitor in which direction of a display can be changed relative to a direction in which light from the subject impinges upon the lens, and a photography assist

PATENT

Docket No. 1232-4442
S/N 09/075,885

mechanism for adjusting photographic conditions automatically, said photography assist mechanism having an automatic focus control means which,

wherein at the time of self-photography, in which the direction in which light impinges upon the lens and the display direction of the monitor agree, said automatic focus control means performs control through a sequence different from that at the time of other ordinary photography.

5. (Previously Presented) The apparatus according to claim 4, wherein at the time of self-photography, said automatic focus control means further makes response slower than that at the time of ordinary photography.

6. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~a zoom lens for deciding magnification of a sensed image, and a focusing lens for deciding focal point position of the subject~~ whose image is sensed by the image sensing device, said apparatus comprising:

display means capable of displaying the image sensed by the image sensing device;

moving means for moving display direction of said display means to a direction on the side of the subject;

sensing means for sensing that the display direction of an image on said display means is being moved to the side of the subject by said moving means; and

control means which, if said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject, at first and regardless of status of the subject, controls the sensed-image magnification of the

PATENT

Docket No. 1232-442

S/N 09/015.885

a zoom lens to a wide-angle magnification and controls distance to the subject, which is controlled by the a focusing lens, to a short distance in front of the image sensing apparatus; and

memory means for storing the sensed-image magnification as well as the subject distance, when said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject,

wherein when said sensing means no longer senses that the display direction of the image on said display means is being moved to the side of the subject, said control means controls the zoom lens to the sensed-image magnification that has been stored by said memory means; and controls the focusing lens to the subject distance that has been stored by said memory means.

7. (Original) The apparatus according to claim 6, wherein said control means controls the sensed-image magnification of the zoom lens to a wide-angle limit or to a point near the wide-angle limit, and controls distance to the subject, which is controlled by the focusing lens, to a short-distance limit in front of the image sensing apparatus or to a point near the short-distance limit.

8. (Original) The apparatus according to claim 6, further comprising: magnification setting means for setting said sensed-image magnification controlled by said control means; and subject-distance setting means for setting a subject distance at which the focusing lens, which is controlled by said control means, is brought into focus.

9. (Currently amended) ~~The apparatus according to claim 6, further comprising:~~ An image sensing apparatus having an image sensing device for sensing the

PATENT

Docket No. 1232-4467

S/N 09/073,883

image of a subject whose image is sensed by the image sensing device, said apparatus

comprising:

display means capable of displaying the image sensed by the image sensing

device;

moving means for moving display direction of said display means to a

direction on the side of the subject; sensing means for sensing that the display direction of

an image on said display means is being moved to the side of the subject by said moving

means;

control means which, if said sensing means has sensed that the display

direction of the image on said display means is being moved to the side of the subject, at

first and regardless of status of the subject, controls the sensed-image magnification of the

zoom lens to a wide-angle magnification and controls distance to the subject, which is

controlled by the focusing lens, to a short distance in front of the image sensing apparatus;

and

recording means for recording an image based upon an image signal indicative of an image sensed by said image sensing device, and control inhibiting means for inhibiting control by said control means if an image is being recorded by said recording means.

10. (Canceled)

11. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~and a zoom lens for deciding magnification of a sensed image,~~ said apparatus comprising:

PATENT

Docket No. 1232-4442S/N 09/075.885

display means capable of displaying the image sensed by said image sensing device;

moving means for moving display direction of said display means to a direction on the side of the subject;

sensing means for sensing that the display direction of the image on said display means is being moved to the side of the subject by said moving means;

memory means for storing the sensed image magnification controlled by the a zoom lens when said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject; and

control means which, if said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject, controls the image magnification of the zoom lens to a wide-angle magnification, and when said sensing means no longer senses that the display direction of the image on said display means is being moved to the side of the subject, controls the zoom lens to the sensed-image magnification that has been stored by said memory means.

12. (Original) The apparatus according to claim 11, wherein said control means controls the sensed-image magnification of the zoom lens to the wide-angle limit or to a point near the wide-angle limit.

13. (Original) The apparatus according to claim 11, further comprising magnification setting means for setting the sensed-image magnification controlled by said control means.

14. (Canceled).

PATENT

Docket No. 1232-1441
S/N 09/075,885

15. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~and a focusing lens for deciding focal point position of the subject~~ whose image is sensed by the image sensing device, said apparatus comprising:

display means capable of displaying the image sensed by said image sensing device;

moving means for moving display direction of the display means to a direction on the side of the subject;

sensing means for sensing that the display direction of the image on said display means is being moved to the side of the subject by said moving means;

memory means for storing the subject distance controlled by the a focusing lens when said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject; and

control means which, if said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject, controls distance to the subject, which is controlled by the focusing lens, to a short distance in front of the image sensing apparatus, and when said sensing means no longer senses that the display direction of the image on said display means is being moved to the side of the subject, said control means controls the focusing lens to the subject distance that has been stored by said memory means.

16. (Original) The apparatus according to claim 15, wherein said control means controls distance to the subject, which is controlled by the focusing lens, to a short-distance limit in front of the image sensing apparatus or to a point near the short-distance limit.

PATENT

Docket No. 1232-442S/N 09/015,883

17. (Original) The apparatus according to claim 15, further comprising subject-distance setting means for setting a subject distance controlled by the focusing lens, which is controlled by said control means.

18. (Canceled)

19. (Previously Presented) The apparatus according to claim 6, further comprising automatic focusing means for executing automatic focusing after the focusing lens has been controlled by said control means.

20. (Original) The apparatus according to claim 15, further comprising automatic focusing means for executing automatic focusing after the focusing lens has been controlled by said control means.

21. (Previously Presented) The apparatus according to claim 8, wherein said subject-distance setting means is capable of setting a subject distance within a range of 10 cm to 1 m.

22. (Original) The apparatus according to claim 17, wherein said subject-distance setting means is capable of setting a subject distance within a range of 10 cm to 1 m.

23. (Currently amended) An image sensing apparatus having an image sensing device; for sensing the image of a subject, ~~and a zoom lens for deciding magnification of a sensed image;~~ said apparatus comprising:

display means capable of displaying the image sensed by said image sensing device;

PATENT

Docket No. 12324241
S/N 09/073825

moving means for moving display direction of said display means to a direction on the side of the subject; sensing means for sensing that the display direction of the image on said display means is being moved to the side of the subject by said moving means;

memory means for storing the sensed-image magnification controlled by the a zoom lens, as well as the subject distance controlled by the a focusing lens, when said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject; and

control means for controlling the zoom lens to the sensed-image magnification that has been stored by said memory means and the focusing lens to the subject distance that has been stored by said memory means when said sensing means no longer senses that the display direction of the image on said display means is being moved to the side of the subject.

24. (Canceled)

25. (Original) An image sensing apparatus having an image sensing device for sensing the image of a subject, and a focusing lens for deciding focal point position of the subject whose image is sensed by the image sensing device, said apparatus comprising:

display means capable of displaying the image sensed by said image sensing device;

moving means for moving display direction of said display means to a direction on the side of the subject; sensing means for sensing that the display direction of

PATENT

Pocket No. 1232-442
S/N 09/075885

the image on said display means is being moved to the side of the subject by said moving means;

memory means for storing the subject distance controlled by the focusing lens when said sensing means has sensed that the display direction of the image on said display means is being moved to the side of the subject; and

control means for controlling the focusing lens to the subject distance that has been stored by said memory means when the sensing means no longer senses that the display direction of the image on said display means is being moved to the side of the subject.

26. (Previously Presented) A method of performing photography with an image sensing apparatus by which a photographer can be perform self-photography, wherein in a case where said image sensing apparatus has at least one of an automatic exposure function, automatic focusing function and zoom function, comprising the steps of:

setting parameters different from those at the time of ordinary photography when it is sensed that the photographer is performing self-photography;

saving sensed-image magnification and distance to a subject that prevailed at the time of ordinary photography if self-photography is sensed; and

restoring the saved sensed-image magnification and distance to the subject when ordinary photography is restored.

27. (Original) The method according to claim 26, wherein in a case where said image sensing apparatus has the automatic exposure function or the automatic focusing

PATENT

Docket No. 1232-4432S/N 09/075,865

function, a photometry area is narrowed to a central portion more at the time of self-photography than at the time of ordinary photography.

28. (Original) The method according to claim 26, wherein in a case where said image sensing apparatus has the zoom function, magnification of a sensed image is initially set to the vicinity of a wide-angle limit and distance to a subject is initially set to a short distance in front of the image sensing apparatus.

29. (Canceled)

30. (Previously Presented) A storage medium for storing, in computer readable fashion, a control program for controlling an image sensing apparatus by which a photographer can perform self-photography, said control program including at least the steps of:

setting parameters, which are used in an automatic exposure function, automatic focusing function and zoom function, to parameters different from those at the time of ordinary photography when it is sensed that the photographer is performing self-photography;

saving sensed-image magnification and distance to a subject that prevailed at the time of ordinary photography if self-photography is sensed; and

restoring the saved sensed-image magnification and distance to the subject when ordinary photography is restored.

31. (Previously Presented) An image sensing apparatus having a lens for forming an image of a subject, a monitor in which direction of a display can be changed relative to a direction in which light from the subject impinges upon the lens, and a photography assist

PATENT

Docket No. 1232-4442

S/N 09/075,885

mechanism for adjusting photographic conditions automatically, said photography assist mechanism having an automatic exposure control unit,

wherein at the time of self-photography, in which the direction in which light impinges upon the lens and the display direction of the monitor agree, said automatic exposure control unit performs control by a photometry method different from that at the time of other ordinary photography.

32. (Previously Presented) An image sensing apparatus having a lens for forming an image of a subject, a monitor in which direction of a display can be changed relative to a direction in which light from the subject impinges upon the lens, and a photography assist mechanism for adjusting photographic conditions automatically, said photography assist mechanism having an automatic focus control unit,

wherein at the time of self-photography, in which the direction in which light impinges upon the lens and the display direction of the monitor agree, said automatic focus control unit performs control through a sequence different from that at the time of other ordinary photography.

33. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~a zoom lens for deciding magnification of a sensed image, and a focusing lens for deciding focal point position of the subject~~ whose image is sensed by the image sensing device, said apparatus comprising:

display unit which displays the image sensed by the image sensing device;

moving unit which moves display direction of said display unit to a direction on the side of the subject;

sensing unit which senses that the display direction of an image on said display unit is being moved to the side of the subject by said moving unit; and

PATENT

Docket No. 1232-442

S/N 09/075,895

control unit which, if said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject, at first and regardless of status of the subject, controls the sensed-image magnification of the a zoom lens to a wide-angle magnification and controls distance to the subject, which is controlled by the a focusing lens, to a short distance in front of the image sensing apparatus; and

memory unit for storing the sensed-image magnification as well as the subject distance, when said sensing unit has sensed that the display direction of the image on said display means is being moved to the side of the subject,

wherein when said sensing unit no longer senses that the display direction of the image on said display unit is being moved to the side of the subject, said control unit controls the zoom lens to the sensed-image magnification that has been stored by said memory unit and controls the focusing lens to the subject distance that has been stored by said memory unit.

34. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~and a zoom lens for deciding magnification of a sensed image,~~ said apparatus comprising:

display unit which is capable of displaying the image sensed by said image sensing device;

moving unit which moves the display direction of said display unit to a direction on the side of the subject;

sensing unit which senses that the display direction of the image on said display unit is being moved to the side of the subject by said moving unit;

memory unit which stores the sensed-image magnification controlled by the a zoom lens when said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject; and

control unit which, if said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject, controls the image

PATENT

Docket No. 1232-442S/N 09/075,885

magnification of the zoom lens to a wide-angle magnification , and when said sensing unit no longer senses that the display direction of the image on said display unit is being moved to the side of the subject, controls the zoom lens to the sensed-image magnification that has been stored by said memory unit.

35. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~and a focusing lens for deciding focal point position of the subject~~ whose image is sensed by the image sensing device, said apparatus comprising:

display unit which is capable of displaying the image sensed by said image sensing device;

moving unit which moves display direction of the display unit to a direction on the side of the subject;

sensing unit which senses that the display direction of the image on said display unit is being moved to the side of the subject by said moving unit;

memory unit which stores the subject distance controlled by ~~the~~ a focusing lens when said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject; and

control unit which, if said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject, controls distance to the subject, which is controlled by the focusing lens, to a short distance in front of the image sensing apparatus , and when said sensing unit no longer senses that the display direction of the image on said display unit is being moved to the side of the subject, controls the focusing lens to the subject distance that has been stored by said memory unit.

36. (Previously Presented) The apparatus according to claim 33, further comprising an automatic focusing unit which executes automatic focusing after the focusing lens has been controlled by said control unit.

PATENT

Docket No. 1232-242S/N 02/075813

37. (Currently amended) An image sensing apparatus having an image sensing device for sensing the image of a subject, ~~and a zoom lens for deciding magnification of a sensed image~~; said apparatus comprising:

display unit which is capable of displaying the image sensed by said image sensing device;

moving unit which moves the display direction of said display unit to a direction on the side of the subject;

sensing unit which senses that the display direction of the image on said display unit is being moved to the side of the subject by said moving unit;

memory unit which stores the sensed-image magnification controlled by the ~~a~~ zoom lens, as well as the subject distance controlled by the ~~a~~ focusing lens, when said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject; and

control unit which controls the zoom lens to the sensed-image magnification that has been stored by said memory unit and the focusing lens to the subject distance that has been stored by said memory unit when said sensing unit no longer senses that the display direction of the image on said display unit is being moved to the side of the subject.

38. (Previously Presented) An image sensing apparatus having an image sensing device for sensing the image of a subject, and a focusing lens for deciding focal point position of the subject whose image is sensed by the image sensing device, said apparatus comprising:

display unit which is capable of displaying the image sensed by said image sensing device;

moving unit which moves display direction of said display unit to a direction on the side of the subject;

PATENT

Docket No. 1232-4442S/N 09/075,585

sensing unit which senses that the display direction of the image on said display unit is being moved to the side of the subject by said moving unit;

memory unit which stores the subject distance controlled by the focusing lens when said sensing unit has sensed that the display direction of the image on said display unit is being moved to the side of the subject; and

control unit which controls the focusing lens to the subject distance that has been stored by said memory unit when the sensing unit no longer senses that the display direction of the image on said display unit is being moved to the side of the subject.